even more splashed and striated; their tails were quite short, like those of young Blue Wrens (Malurus) when first fledged, but they could fly for a few yards very fairly.

The adult male is a darker and handsomer bird than the female; the striations are more distinct; and I have noticed as a little trait that it sings desperately when we are approaching its nest or young too closely, hoping, no doubt, to draw attention to itself and away from the home or the concealed offspring.

Appended are measurements of the two typical nests described above:—

- (1) Massive and domed. Total length, upper side 6½ inches, lower side 6 in.; height at front 4½ in.; height at back 3 in.; height of entrance-aperture 2½ in., across entrance-aperture 2 in.; length of egg-cavity, front to back, 2½ in.
- (2) Smaller, like a deep cup much tilted. Outside measurements: front to back $3\frac{1}{2}$ inches, top to bottom $4\frac{1}{2}$ in. Inside measurement: entrance to back 3 in.

The great depth from the top to the bottom is due to the quantity of moss and other materials placed at the base.

XII.—Notes on some South-American Birds. By Claude H. B. Grant, M.B.O.U.

(Text-figures 4 & 5.)

Since the publication of my paper in 'The Ibis' for 1911, I have had a further opportunity of examining more carefully the series of skins and eggs of some of the species mentioned in that communication. These notes will help to elucidate some of what have hitherto appeared to be rather complicated questions.

I have pleasure in again thanking Mr. Ogilvie-Grant for so kindly assisting me in the National Collection, Mr. Ernest Gibson for allowing me to examine specimens in his private series, and Dr. Selater for allowing me to encroach on his time in the correction of the proofs.

VANELLUS GRISESCENS Prazak.

Through the kindness of Dr. Reichenow I have recently had the loan of a typical specimen of this species obtained in Paraguay; this agrees with the large series from the Argentine which are recorded in 'The Ibis' for 1911, p. 464, under the name of V. cayennensis.

When writing that paper I intended to name the Argentine bird, but fortunately the description was not published.

On again going through the series now in the National Collection, some other differences, besides those described by Dr. Prazak, are observable.

The breast-band of V, grisescens is washed with oily-green, approaching V, chilensis in this respect; the light edges to the inner secondaries and tertials are exactly intermediate between those of V, chilensis and V, canennensis, as also is the extent of feathering on the tibia.

In size the bird is also intermediate.

The geographical distribution of the three species appears to be as follows:—

V. chilensis. Central and Southern Chili to Southern Patagonia.

V. grisescens. Northern Patagonia, Argentina, Uruguay, and Paraguay across to Northern Chili.

V. cayennensis. Brazil, Guiana, Colombia, Peru, and probably the rest of the Northern States.

As might be expected, some Northern specimens of *V. grisescens* are very close to the true *V. cayennensis*, but typical forms are quite distinct.

NOTHURA MACULOSA. (Text-fig. 4, p. 275.)

On working out the collection for the purposes of the paper mentioned above, I found no little difficulty in distinguishing between the fully adult and immature birds of this species.

On close examination I find that a good distinction can

be found in the inner secondaries and tertials, as shown in the text-figure.

In the adult the concentric rings are broken and usually quite open towards and at the tip. In the young these feathers have complete concentric rings, i.e. closed towards and at the tip.





Feathers from (A) the young, and (B) the adult of Nothura maculosa.

There is also a difference in size, the younger birds being somewhat smaller and more buffy than the fully adult; but these differences are not perhaps always to be relied on, though those of the feathers appear to be quite constant.

RALLUS RHYTIRYNCHUS. (Ibis, 1911, p. 462.)

The young plumage of this species appears to be undescribed; it differs from the adult as follows:—

Above olive-brown, paler on the wings and more sooty on the head and rump; wing-feathers and tail sooty brown, the latter broadly edged with olive-brown; cheeks, car-coverts, and ill-defined superciliary stripe durty white mottled with sooty brown; lores dusky brown; sides of neck and flanks dirty buffy brown, abdomen paler, under tail-coverts rather darker; under wing-coverts and axillaries olive-brown, the former edged with whitish; bill, as a rule, shorter and olive in colour.

Plegadis guarauna.

The description of the winter dress of this bird was inadvertently omitted from my paper in The Ibis' for 1911, p. 340, and should be as follows:—"The adults taken in January, February and April are all assuming the winter dress, the under parts apparently changing to the colour of the following specimen.

"Head and neck streaked with white; rest of upper parts including the wings as in the summer dress, but lacking the chestnut on the mantle and wing-coverts; below including thighs sooty brown, strongly washed with purple-violet and with a very slight sheen; under wing-coverts, axillaries, under tail-coverts and tail as in summer dress.

"Birds in first plumage, on the other hand, besides being more oily-green above, are never so strongly streaked on the head, and are sooty brown below without the purple-violet wash; the soft parts are also duller."

Pyrocephalus rubineus.

On again carefully examining the large series of males of this species in the British Museum, I find there is little doubt that my second conclusion (cf. 'Ibis,' 1911, p. 121) is correct, i. e. that there are three distinct plumages:—

The first is as described, op. cit. p. 122.

The second is a particoloured dress, with more or less ashy feathering below and with an ashy crown interspersed with red feathers, or with ashy tips to the scarlet crest.

The third is that of the fully adults, which have the ordinary moult after the breeding-season and again assume a full dress.

All the birds in second plumage that I have examined (February-June) are moulting, unlike one taken in July.

What, however, I should like to examine, and what is not shown in the large series before me, is a first-plumage bird in moult.

CIRCUS MACULOSUS.

The small but good series of this Harrier collected by Miss Runnacles and myself and now in the National Collection (see 'Ibis,' 1911, p. 330), coupled with the series already there, allows me to make some contribution to the bewildering stages of plumage through which this species passes. I am able to make out no less than six stages of plumage which it undergoes, as follows:—

- (1) In down.
- (2) Above dark brown, the feathers edged with rufous; below throat buff; breast and belly, each feather longitudinally centred with dark brown and edged with buff, giving the under parts a broadly streaked appearance; thighs rufous; under tail-coverts mixed dark brown, buff, and rufous.
- (3) A very dark dress, deep brown above and below; marked with rufous on the breast; wing-coverts, wings, and tail dirty grey.
- (4) A still darker dress, blackish brown above and below, no rufous markings; wings and tail clearer grey.
- (5) Above similar to the fourth dress; below blackish brown, each feather spotted or barred with whitish (not longitudinally centred as in the second dress), giving these parts a mottled appearance; thighs rich rufous, sometimes tipped with lighter colour; under tail-coverts barred rufous and white.
- (6) Adult dress.—Male: white below, sparingly spotted and streaked with black on the flanks and belly, and with narrow V-shaped buff markings on the thighs.

Female: suffused with buff below, with broader and more numerous streaks and spots of black, but with less black on the foreneck. Phaëthusa magnirostris.

The following correction should be made in my paper ('Ibis,' 1911, p. 471):—

In the last line but one, "they were" should be "this

species (P. magnirostris) was."

MOLOTHRI. (Text-fig. 5.)

A rather hopeless state of confusion exists with regard to the eggs of the three species of *Molothrus* found in the Argentine, viz.: *M. bonariensis*, *M. rufo-axillaris*, and *M. badius*.

Text fig 5



A, B. Eggs of Molothrus badius. C-E. ,, Molothrus rufo-axillaris.

I have recently carefully examined the series now in the British Museum, and have been able to come to the following conclusions, which throw some further light on this interesting question.

Also I have compiled a list of the foster-parents of the two parasitical members, not only from my own observations, but

also from those recorded by Mr. Hudson in the 'Proceedings' of the Zoological Society and 'Argentine Ornithology,' and from the collections made by Miss I. G. Runnacles.

Unfortunately, with regard to the eggs of *M. rufo-axillaris* and *M. badius* collected by Mr. Hudson and now in the British Museum, they were taken at a time when Mr. Hudson was very doubtful in his own mind as to their identity, as shown by his letters in the P. Z. S. for 1870, 1872, and 1874.

Hence the only eggs which I positively know to be authentic are those collected by Miss Runnacles and myself, and I have based my conclusions mainly on those.

The eggs of *M. honariensis* are distinct enough and cannot easily be confounded with either those of *M. rufo-axillaris* or those of *M. hadius*, even when found together in the same nest.

There appears to be about nine varieties of colouring, varying roughly from pure white, with or without markings, to a fawn-colour or flesh-colour, with more or less numerous markings.

So far as we know at present, the following are the fosterparents of this species, though the list is probably not yet complete:—Mimus modulator, Troylodytes hornensis, Furnarius rufus, Anthus correndera, Serpophaga nigricans, Milvulus tyrannus, Machetornis rixosa, Turdus ruficentris, Synallaxis hudsoni, Brachyspiza pileata and Molothrus badius.

It is to distinguish between the eggs of *M. rufo-axiilaris* and *M. badius* that the real difficulty has hitherto existed, and I have arrived at my conclusions from knowing the authenticity of the series before me and from the evidence of the individual eggs taken from carefully determined nests.

The main mistake has arisen from taking it for granted that eggs found in the nests of M. badius were those of that species. This is by no means the case, as the majority of eggs found in the nests of M. badius (where both the parent birds are attendant) are really the eggs of M. rufo-axillaris, as is conclusively shown by comparing specimens with those taken from nests of other birds in which M. rufo-axillaris is known to place its eggs.